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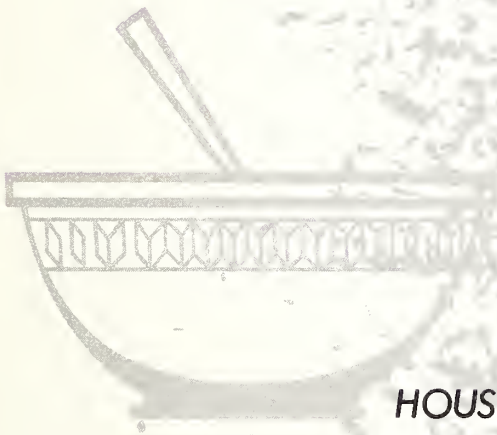
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HOUSEHOLD CONSUMERS' ACCEPTANCE OF

INSTANT SWEETPOTATO FLAKES

PREFACE

This study was designed to provide producers, processors, distributors, and other interested persons with information about consumer acceptance of a new dehydrated instant sweetpotato. The study is part of a broad program of continuing research aimed at expanding markets for farm products. Determination of the acceptability of products in various forms and ways to improve marketing provide a guide to industry in developing new markets or expanding present ones.

The Special Surveys Branch, Standards and Research Division, Statistical Reporting Service, assumed responsibility for the conduct of the research. The test product was developed and supplied by the Southern Utilization Research and Development Division, Agricultural Research Service, New Orleans, La.

The project was under the general supervision of Trienah Meyers, Chief, Special Surveys Branch, Standards and Research Division, Statistical Reporting Service.

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HIGHLIGHTS

A new form of canned, cooked, dehydrated sweetpotato flakes developed by the Agricultural Research Service of the U. S. Department of Agriculture won favor with homemakers in this study, conducted by the Department's Statistical Reporting Service.

The new flakes, which rehydrate into mashed sweetpotatoes in minutes, were supplied to a panel of over 200 homemakers in the Alexandria, Va., area during August and September of 1962. Panel members were asked to prepare the test product in two ways. The first week they were to fix plain mashed sweetpotatoes. The next week they were given a choice of 1 of 3 recipes to try: sweetpotato pie, a casserole with marshmallow topping, or a casserole with orange topping.

A majority of the women were at least moderately pleased with the flakes in both of the recipes they tried. The more highly seasoned dishes were preferred, however, largely in terms of their improved flavor. About 8 of every 10 women who tried the pie liked it very much, roughly 5 out of 10 liked the casserole dishes very much, but only 4 out of 10 gave this favorable a rating to the relatively bland mashed sweetpotatoes.

Convenience of the new product seemed to be the major attraction for most of the homemakers. About three-fourths volunteered such comments as "fine time saver," and "very easy and quick to prepare."

Few respondents reported difficulty in reconstituting the new product or in following the recipes. About 1 of every 4 women changed the test recipes by adding butter, margarine, spices, or sugar to suit the taste.

These results suggest that the flakes have considerable commercial potential. On the basis of their experience with the first recipe, more than half the women said they would prefer the flakes to fresh sweetpotatoes for making mashed sweetpotatoes. About two-thirds said they would prefer the flakes to canned sweetpotatoes for making mashed sweetpotatoes. After they had tried the second test dish, 84 percent of the respondents said they would buy the test product if it were sold locally. While these figures are probably not indicative of the actual number who would purchase, they do indicate that the product was well received by a majority of those who tried it.

HOUSEHOLD CONSUMERS' ACCEPTANCE OF
INSTANT SWEETPOTATO FLAKES

by Dan S. Hollon, Social Science Analyst
Standards and Research Division, Statistical Reporting Service

INTRODUCTION

The per capita consumption of sweetpotatoes has dropped sharply in the past two decades. Consumption in 1961 was about a third of that in 1941. Total production during this period dropped by about half. 1/

Coupled with the decline in production and consumption, the industry faces a problem each year in marketing the total crop. A varying proportion of each crop is rejected as unsuitable for the fresh market or for canning on the basis of appearance rather than condition or quality. Oversized, undersized, or misshapen sweetpotatoes often are left in the fields to be used as livestock feed or to rot.

To help solve some of these problems, the Department of Agriculture's Southern Utilization Research and Development Division developed a new processed form of sweetpotatoes. In this new form, sweetpotatoes are cooked, dehydrated, and flaked. Mashed sweetpotatoes can be made in minutes from the flakes simply by adding hot water or other liquid. Laboratory tests and trials by the Department's home economists indicated that the reconstituted product has the qualities of flavor, texture, and appearance found in mashed sweetpotatoes made from the fresh product.

These initial tests indicated that the new product might be commercially successful. Not only do the flakes appear to be a satisfactory substitute for fresh and canned sweetpotatoes in some types of recipes, but they also possess an advantage over the fresh in being in a form decidedly more convenient to use. Moreover, commercial development would provide an outlet for that portion of the sweetpotato crop which is presently unmarketable because of size or shape.

In April and May of 1962, the Market Potentials Branch, Marketing Economics Division, Economic Research Service, conducted tests among a sample of restaurants and other institutional outlets in two cities to determine acceptance of the new product in the institutional market. The results indicated a very favorable reaction to the new flakes among restaurant operators and operators of selected institutional outlets such as schools, hospitals, etc. 2/

The present study was made to determine the average homemaker's acceptance of the test product.

1/ Simmons, Will. Trends in the Geographic Pattern of Production of Sweetpotatoes. Vegetable Situation, TVS-145, U. S. Dept. Agr. July 1962.

2/ Dwoskin, P. B., Hester, O. C., Kerr, H. W., and Bayton, J. A. Market Test of Instant Sweetpotatoes in Selected Institutional Outlets. U. S. Dept. Agr., Mktg. Res. Rpt. 580, 41 pp., illus. 1963.

RESEARCH DESIGN

Alexandria and its adjoining suburbs in Fairfax County, Va., were chosen as the location of the study. The community is part of the Washington, D. C. metropolitan area. A probability sample of clusters of addresses was selected for participation from a street directory of Alexandria and vicinity. Although the sample was representative of the Alexandria area, no attempt was made to select a sample representative of all or any other part of the Nation. It was believed that a preliminary test with this cross-section of homemakers would provide certain necessary information about the new product and would indicate whether additional market studies were desirable.

Fieldwork began August 7, 1962, and continued until September 18, 1962.

Three interviews were to be conducted with each sample household. The first interview was made to secure cooperation in the test and to ascertain the existing pattern of sweetpotato use and opinions about sweetpotatoes. Each homemaker was asked to use the new flakes twice, in two different recipes, 3/ one in each of two succeeding weeks. During the first week, all housewives were asked to prepare mashed sweetpotatoes, which were made by adding hot water and a small amount of seasoning. This recipe was selected for the initial test to evaluate the sweetpotato flakes in as simple a dish as possible.

During the second week, each housewife was given a choice of one of three recipes to try: sweetpotato pie, a casserole with orange topping, or a casserole with marshmallow topping. These recipes were designed to test the assumption that the mashed sweetpotatoes might not be a familiar or tasty dish for many who were accustomed to more spicy or highly flavored sweetpotato recipes.

In addition to a supply of the test product, each homemaker was given a recipe and was asked to follow it exactly. Homemakers were also provided with rating scales on which they and all family members 12 years of age and over were asked to rate their opinions of each test dish as soon as they had eaten it. The homemaker was reinterviewed within a few days after she had served a dish. She was questioned on her reactions to the flakes in the recipe she had just used.

A total of 316 households was originally selected for interview. Of this number:

- 272 (or 86 percent) completed the first interview only.
- 253 (or 80 percent) completed the first and second interviews only.
- 214 (or 68 percent) completed all three interviews.

Reasons given by those failing to complete some or all of the interviews suggest that the results were not slanted in favor of the test product by the losses, since those who dropped out were not predominately homemakers who did not like sweetpotatoes or did not like the test product.

3/ The recipes were developed by home economists in the Human Nutrition Division, Agricultural Research Service, U. S. Department of Agriculture. They were tried by a sample of Department employees to establish a final selection of recipes which were workable and attractive to the average housewife.

RESULTS OF THE STUDY

The First Interview

Two hundred and seventy-two housewives were interviewed in the initial stage of the test to secure their cooperation and to ascertain their backgrounds with respect to use of and opinions regarding sweetpotatoes in general. All the respondents were questioned concerning how often they used sweetpotatoes and, if appropriate, reasons for infrequent use or nonuse. Beyond that point, the 34 respondents who did not use sweetpotatoes at all were not asked any further questions about sweetpotatoes on the first interview.

Frequency of Sweetpotato Usage:

Since sweetpotatoes are considered a seasonal vegetable, all respondents were first asked about how often they served sweetpotatoes to their families during the fall and winter months. The same question was then asked concerning spring and summer months. About one-fourth of the homemakers used sweetpotatoes once a week or more during the fall and winter months. Nearly half used them at least two or three times a month during this period.

Homemakers' replies to the question: "About how often do you use sweetpotatoes during the fall and winter months?"

<u>Replies</u>	<u>Percent</u>
More than once a week.	8
Once a week.	16
Two or three times a month	23
Once a month	15
Every two or three months.	11
Once or twice.	14
Not at all	13
Total	100
Number of respondents	272

There was some tendency for more frequent use of sweetpotatoes among older homemakers. Differences in family income, however, did not appear related to frequency of use.

Women who used sweetpotatoes less than once a week during these months were asked why they did not use them more often. About half replied that some or all of the family members did not like sweetpotatoes. A fairly substantial number of women thought of sweetpotatoes as a periodic dish only, and not as a daily or even weekly part of their menu. For example, 13 percent thought of sweetpotatoes as part of a traditional holiday menu, but not as a regular vegetable; about the same percentage ate them only with certain meats, such as pork, ham, or poultry. Another reason for infrequent use appeared in the replies. Twelve percent of the respondents felt that sweetpotatoes required too much work to fix, while about the same proportion thought sweetpotatoes were indigestible or fattening, and almost as many (9 percent) said it was difficult to get good fresh sweetpotatoes.

The number of women using sweetpotatoes, and the number of times they used them, decreased during the spring and summer months. Four out of 10 did not use sweetpotatoes at all during these months; only about 2 out of 10 used them more than once a month. Comparing the frequency with which each woman used them in both periods:

- 60 percent used them less often during the spring and summer months
- 37 percent used them about the same all year
- 3 percent used them more often during the spring and summer months

Most of the women who used them less often during the spring and summer did so to avoid the heat of cooking or to avoid the heating qualities of the sweetpotatoes themselves. Forty-two percent of those who used them less during the warmer months said they did not serve them more often because they wanted to cook as little as possible or they especially disliked using the oven during these months. Thirty-two percent said they did not like to serve hot or starchy foods during the summer, but preferred lighter foods, such as salads.

In addition, 14 percent of the women said they served them less often in the spring or summer because they could not get good quality fresh sweetpotatoes then; that the ones available were old, spoiled, or rotten. A small percentage also said that in the summer they did not eat those kinds of meat with which they served sweetpotatoes, or that there were no occasions during the warmer months for which sweetpotatoes are a traditional dish.

The Homemaker's Evaluation of Sweetpotatoes:

To get the homemaker's personal evaluation of sweetpotatoes, all respondents who had used them in the preceding year were asked to rate sweetpotatoes in general on a 7 point scale. The scale ranged from "Like very much" to "Dislike very much." Most of the respondents said they liked sweetpotatoes: About 6 of every 10 liked them very much, and about 3 out of 10 liked them moderately (table 1).

After rating sweetpotatoes in general, respondents were asked why they had rated them as they did, and then they were asked if there were other things they liked or disliked about sweetpotatoes. When the things housewives said they liked and disliked about sweetpotatoes were tabulated, taste was the factor that received most of the favorable comments. Seventy-five percent of the housewives commented favorably on the flavor of sweetpotatoes. About half of these women said they liked the sweet taste. The remainder simply commented that they liked the flavor, that it was "good," or "wholesome," or "rich."

The "usefulness" of sweetpotatoes was mentioned by a little over half of the women: 27 percent specified that one of the things they liked about sweetpotatoes was that they could be used in so many different dishes; another 20 percent liked them because they complemented certain meats; and 16 percent liked the way sweetpotatoes added color to a menu (table 2).

On the negative side, 14 percent of the women said that they were inconvenient to fix, took too much time to fix; 13 percent gave health factors as a reason for disliking; 10 percent thought sweetpotatoes were not versatile. Overall, 4 of every 10 women had no negative comments to make, while only a few (2 percent) said there was nothing they liked about sweetpotatoes (table 3).

The Kind of Sweetpotatoes Used:

Homemakers who had used sweetpotatoes during the past year were asked, "What kind of sweetpotatoes do you serve most often, fresh or canned?", and, depending on their answer, were then asked, "Have you also served (fresh or canned sweetpotatoes) during the past 12 months?" Replies to these questions indicated:

- 62 percent of the homemakers used both fresh and canned sweetpotatoes
 - 38 percent used more fresh than canned
 - 21 percent used more canned than fresh
 - 3 percent used both about the same
- 26 percent of the homemakers used fresh sweetpotatoes only
- 11 percent used canned only
- 1 percent used frozen only

Differences in age of respondents or family income seemed to have little effect on the kind of sweetpotatoes used, or the kind used most often.

Those who had used only one kind were further asked why they had not used the other. Among those who had used only fresh sweetpotatoes, the most frequent reason for not using canned was that respondents preferred the taste of fresh sweetpotatoes. Several said "I just like the fresh better. It's better tasting," or "I just don't like the flavor of canned sweetpotatoes." Almost as many indicated that they did not like canned things generally for much the same reasons, for example: "I don't like canned foods. They don't taste like fresh....," etc. A majority of those who had used only canned sweetpotatoes said they had not used the fresh because the canned were more convenient to fix.

Those who had used canned at any time during the past year were then asked why they chose the canned instead of fresh. Two-thirds said they chose the canned because the canned took less time or less work to prepare. Fourteen percent mentioned that they bought canned sweetpotatoes when fresh ones were of poor quality, while 12 percent said they bought the canned when the fresh were not available. When asked what characteristics of fresh sweetpotatoes they liked better than canned:

- 57 percent said they preferred the taste of the fresh sweetpotatoes
- 23 percent preferred the texture of the fresh
- 15 percent said the fresh could be used in more and varied ways
- 14 percent said there was nothing about the fresh they preferred over the canned

As a final question to explore the relative preferences for fresh or canned sweetpotatoes, those who used both fresh and canned sweetpotatoes were asked why they did not buy canned all the time. In reply, 59 percent said they preferred the fresh sweetpotatoes (largely in terms of taste) but used the canned as a substitute either for convenience or because the fresh were not available or of good quality. Twenty-seven percent said the canned sweetpotatoes were limited in the ways they could be fixed and especially that they could not be baked. Ten percent said they liked to use both, for variety.

While canned sweetpotatoes were quite popular, frozen sweetpotatoes were little used in this area. About half the housewives had neither seen nor heard of frozen sweetpotatoes. About one-fourth of the women had seen but not purchased them, while the remaining one-fourth had purchased frozen sweetpotatoes during the past year. The reactions of users to the frozen sweetpotatoes tended to be rather evenly divided between favorable and unfavorable comments. Favorable comments included such things as, "they are easy to fix," or "they have a good taste." Negative comments included such things as, "they are too sweet," or "did not like the texture."

What Housewives Look for in Fresh Sweetpotatoes:

Housewives who had used fresh sweetpotatoes in the last year were asked what things they looked for when they shopped for fresh sweetpotatoes, and, for those things they mentioned looking for, why they considered them important. Replies centered about three important attributes of fresh sweetpotatoes--size, condition, and color. Size was important for 68 percent of the respondents; condition was important for 66 percent; and color was important for 45 percent. A majority of the homemakers who mentioned size like a medium-sized sweetpotato. It was preferred primarily because it requires less cooking time than a large one, but also because the medium size is a convenient unit of measure; that is, one potato serves one person.

Condition was obviously important, although the homemakers tended to differ upon what external signs indicated condition. Three signs were mentioned, however, either singly or in combination: firmness; no scars, spots, or blemishes; and a smooth unshriveled skin.

Color was important mainly as an indicator of the desired flavor. The largest group preferred the red or deep red color.

Ways in Which Sweetpotatoes are Served:

More women (3 out of 4) had served baked sweetpotatoes than any other sweetpotato dish. The baked were followed closely by candied sweetpotatoes (69 percent), and sweetpotatoes with marshmallow topping (65 percent). Sweetpotato pie and mashed sweetpotatoes (the basic test dish) had been served by 37 percent. Fewer had served an orange casserole.

Results of the First Trial of Sweetpotato Flakes

Two hundred and fifty-three women tried the sweetpotato flakes as plain mashed sweetpotatoes. 4/ The dish itself was the most simple recipe possible,

4/ Of 272 respondents interviewed initially: 238 had used, and therefore had rated sweetpotatoes in general, and 34 had not. Of 253 respondents interviewed a second time: All had rated the first test dish; 227 had also rated sweetpotatoes in general, and 26 had not. Of 214 respondents interviewed a third time: All had rated the first and second test dish; 193 had also rated sweetpotatoes in general, and 21 had not.

and took only a few minutes to make. It required only the addition of hot water or milk, a little salt, sugar, and butter or margarine. The recipe and supplies of the test product were provided for each participating household. The respondent and all members of her family 12 years of age and over were asked to rate the dish on a 7-point scale immediately after eating it. The homemaker was then reinterviewed within a day or two after serving the test dish and her reactions were recorded.

Homemakers' Ratings of Mashed Sweetpotato Flakes:

Seventy percent of the women who tried them rated the mashed sweetpotato flakes as at least moderately well liked; 40 percent gave the test dish the top rating of "like very much," (table 1). In explaining their ratings, convenience was the characteristic of the flakes most frequently mentioned; 78 percent of the women said the flakes were easy to fix, saved time and work. Taste was also important: 57 percent of the respondents commented favorably upon the taste of the flakes. This was somewhat lower than the proportion who commented favorably on the flavor of sweetpotatoes in general (table 2). The texture of the flakes received favorable mention by 36 percent of the respondents, only 5 percent had mentioned this as a favorable attribute of sweetpotatoes in general.

On the negative side, the taste of the flakes received most of the unfavorable comments (table 3). Forty-one percent of the women had unfavorable comments regarding taste. The major complaints were that the taste was flat or bland or artificial, although a few women mentioned that the flakes were too sweet, not sweet enough, or tasted like pumpkin or squash rather than sweetpotatoes.

The texture of the test product also received some unfavorable mention, although it was minor (17 percent) compared with the number of women who mentioned taste as a negative attribute. Complaints on texture were mainly that the flakes were too watery or too dry or sticky. These comments may include some women who actually had difficulty in adequately reconstituting the test product.

Overall, 48 percent of the homemakers said there was nothing they disliked about the flakes, while 6 percent said there was nothing they liked about them.

A Comparison of the Ratings of the First Test Dish with the Ratings of Sweetpotatoes in General:

A glance at the ratings in table 1 for the flakes and sweetpotatoes in general indicates that the mashed sweetpotato flakes were not rated as high as "sweetpotatoes in general" by many respondents. A comparison of each homemaker's rating of sweetpotatoes in general with her rating of the flakes reveals that:

- 44 percent rated the mashed sweetpotato flakes lower than they rated sweetpotatoes in general,
- 42 percent rated both the same, and
- 14 percent rated the flakes higher than they rated sweetpotatoes in general.

When the reasons given for the ratings were separately classified according to whether the respondent rated the flakes at least as high as, or lower than sweetpotatoes in general, it appeared that both groups overwhelmingly endorsed the convenience. But those who rated the flakes lower than sweetpotatoes in general were responsible for most of the negative comments on taste or texture of the flakes. Thus, 77 percent of those who rated the flakes below sweetpotatoes in general were critical of the taste of the flakes, and 28 percent were critical of the texture. Among those who rated the flakes at least as high as sweetpotatoes in general, 80 percent commented favorably on the taste of the flakes and 62 percent commented favorably on the texture (table 4).

A Comparison of Mashed Sweetpotato Flakes with Fresh and Canned Sweetpotatoes:

A direct comparison between opinions of the flakes and of canned and fresh sweetpotatoes was made by asking the homemakers whether they would prefer the flakes to the fresh and to the canned sweetpotatoes for making mashed sweetpotatoes. Only those women who had used fresh sweetpotatoes were asked to compare the fresh with the flakes, and similarly, only those who had used canned sweetpotatoes made the comparison of the flakes with the canned. Of those who had used fresh sweetpotatoes:

- 55 percent said they would prefer the flakes for making mashed sweetpotatoes,
- 36 percent said they would prefer the fresh sweetpotatoes,
- 6 percent had no preference,
- 3 percent not ascertained.

Of those who had used canned sweetpotatoes:

- 63 percent said they would prefer the flakes for making mashed sweetpotatoes,
- 22 percent said they would prefer the canned sweetpotatoes,
- 13 percent had no preference,
- 2 percent not ascertained.

Those women who had rated the flakes below sweetpotatoes in general largely made up the group that would choose the canned or fresh over the flakes. Convenience or ease of preparation was the major reason for choosing the flakes over fresh or canned sweetpotatoes. A better flavor and texture were also frequent reasons given for choosing the flakes over the canned. On the negative side, a preference for the flavor or taste of the fresh or the canned was the reason most often given for choosing one or both of these forms of sweetpotatoes over the flakes (tables 5 and 6).

Respondents were also asked specifically whether they preferred the fresh or the flakes in terms of taste, and similarly whether they preferred the canned or the flakes in terms of taste. Of those who had used fresh sweetpotatoes:

- 51 percent said they preferred the taste of the fresh sweetpotatoes,
- 28 percent said they preferred the taste of the flakes,
- 18 percent had no preference,
- 3 percent not ascertained.

Of those who had used canned sweetpotatoes:

- 29 percent said they preferred the taste of canned sweetpotatoes,
- 47 percent said they preferred the taste of the flakes,
- 22 percent said they had no preference,
- 2 percent not ascertained.

Ratings of the First Test Dish by Household Members other than the Respondent:

All other household members 12 years of age and over were also asked to rate the flakes after they had eaten them. The ratings for these other household members are shown below, classified by the age of the household member. Overall, the ratings of the other household members were significantly below those of the homemakers. However, disregarding the "Not ascertained" category, the distribution of ratings for other household members 18 years of age and over is quite comparable to the distribution of the homemakers' replies:

Ratings	Members 12 to 18 years of age	Members 18 years of age and over	All members 12 years of age and over	Homemaker
	Percent	Percent	Percent	Percent
Like very much-----	26	33	31	40
Like moderately----	12	28	24	30
Like slightly-----	13	15	14	12
Neither like nor dislike-----	16	8	11	4
Dislike slightly---	8	3	4	4
Dislike moderately--	5	4	4	2
Dislike very much--	20	9	12	8
Total-----	100	100	100	100
Number of respond- ents 1/ -----	93	275	376	253

1/ Percentages not shown separately for 8 cases in which the age of the household member was not ascertained.

The difference between the overall ratings for other household members and the homemakers' ratings appear to stem from the significantly lower ratings given the test product by children 12 to 18 years of age. There is some

evidence that these lower ratings by younger people are not simply a reaction to the test product but reflect the fact that fewer young people than older persons tend to like sweetpotatoes in general. Thus 45 percent of the households with children under 18 years of age report that some or all of the children dislike sweetpotatoes in general. Only 26 percent of the households report that some or all other adult members dislike sweetpotatoes.

Changes in the Mashed Recipe:

Although the respondents were asked to follow the recipe given them exactly, about one-quarter of the housewives changed the recipe. For the most part, these changes consisted of additional butter, margarine, spices, or sugar to suit the taste.

About a third of the users suggested changes they would make in the future. For the most part, these follow the line of the changes already made; 16 percent would add spices, chiefly cinnamon or nutmeg; 12 percent would add additional butter or margarine; etc.

Size of the Can:

The test product was packed in a 5-ounce can for the household test. Reconstitution required the addition of an equal amount of liquid, yielding about 10 ounces of mashed sweetpotatoes. Families of four or less were given a single can, those with more than four members were given 2 cans.

Shown below are the homemakers' replies to the question: "About how many servings did you get from one can of Sweetpotato Flakes?"

<u>Number of Servings</u>	<u>Homemakers Reporting</u>
	<u>Percent</u>
Two -----	7
Three -----	21
Four -----	44
Five -----	17
Six -----	9
Seven and over -----	1
Not ascertained -----	1
	<hr/>
Total -----	100
	<hr/>
Number of respondents -----	253

When asked whether the size of the 5-ounce can was satisfactory:

62 percent said the can was about the right size,
 20 percent would prefer a larger can,
 14 percent would prefer a smaller can,
 4 percent not ascertained.

Results of the Second Trial of Sweetpotato Flakes

Respondents were given a choice of one of three recipes for their second test dish--a casserole with marshmallow topping, a casserole with orange topping, or a sweetpotato pie. All of the recipes used mashed sweetpotatoes as the basic ingredient. Each respondent was provided a copy of the recipe and was asked to follow the recipe as closely as possible.

Two hundred and fourteen respondents tried the second test dish. Of these respondents:

- 33 percent tried the pie recipe:
 - 15 percent had made sweetpotato pie before,
 - 13 percent had not,
 - 5 percent not ascertained.
- 46 percent tried the marshmallow recipe:
 - 29 percent had made a casserole with marshmallow topping before,
 - 13 percent had not,
 - 4 percent not ascertained.
- 21 percent tried the orange topping recipe:
 - 7 percent had made a casserole with orange topping before,
 - 14 percent had not.

The respondent and all members of her family 12 years of age and over were asked to rate the test dish after they had eaten it. The respondent was then interviewed within a day or two of serving the second dish to record her reaction.

Respondents' Rating of the Second Test Dish:

Sixty percent of the respondents who tried a second test dish rated it "like very much;" 83 percent liked it at least moderately well. The ratings of the second test recipes showed an improvement over the ratings of the plain mashed sweetpotato flakes. The improvement varied, however, being slight for the marshmallow dish and very substantial for the pie (table 1).

The things homemakers liked and disliked about their second test dish is shown in tables 2 and 3, compared with similar comments for sweetpotatoes in general and the first test dish. The number of unfavorable comments decreased substantially on the second test dish. Convenience remained a major attraction of the flakes over sweetpotatoes in general. The proportion of women giving favorable taste reasons rose on the second test while the proportion giving negative taste reasons declined.

The specific favorable comments on the taste of the second test dishes tended to resemble those on the first. Thus, 22 percent said they liked the flavor; 24 percent thought the flakes had a natural sweetpotato taste; while 13 percent liked the sweet taste. In addition, 14 percent of the respondents said that the topping improved the flavor, while 8 percent said that the second dish tasted better than the first (table 2).

On the negative side, only half as many respondents commented unfavorably on the taste of the second dish as commented unfavorably on the first (table 3). A flat taste or an artificial taste was again most frequently mentioned. The remaining negative comments on the taste of the second recipe were scattered over a variety of criticisms such as: the recipe was too sweet; tastes like pumpkin or squash; etc. Most of these comments were also made about the first test recipe and with about the same frequency. Negative comments on texture declined on the second recipe. The proportion who thought the flakes too dry, as well as those who thought them too watery, declined by half on the second use of the flakes.

An Analysis of the Ratings of the Second Test Dish Compared with the Ratings for the First Test Dish and for Sweetpotatoes in General:

When each homemaker's ratings on both the first and second test are compared, it appears that 35 percent of the respondents rated their second dish higher than the first and 15 percent rated their second dish lower than the first:

Ratings of second test dish	Second Test Dish Served			
	Marsh- mallow casserole	Orange casserole	Pie	Total for pie and casserole dishes
	Percent	Percent	Percent	Percent
Higher than the first....	28	36	43	35
Same as the first.....	52	48	52	50
Lower than the first.....	20	16	5	15
Total.....	100	100	100	100
Number of respondents....	89	44	60	193

Most of the improvement in the ratings of the second test dish came from that group of women who had originally rated the mashed sweetpotato flakes lower than they rated sweetpotatoes in general. The reasons given for the ratings suggested that some of the less favorable reaction was due to the blandness of the mashed form, and that a more highly flavored second dish appealed to their taste. About half of those who had rated their first test dish lower than sweetpotatoes in general revised their opinion of the flakes on the basis of the second test dish, rating it at least as high as they had rated sweetpotatoes in general; the remainder continued to rate the flakes below sweetpotatoes in general. The reasons given for the ratings indicated that, for the most part, this latter group retained their impressions of the flakes as having a flat or artificial taste.

A comparison of ratings of the first and second test dishes with ratings for sweetpotatoes in general is shown below:

Ratings of second test dish	Ratings of First Test Dish		
	lower than	the same or	Total
	sweetpotatoes	higher than	
	in general	sweetpotatoes	
	in general	in general	
	Percent	Percent	Percent
As high or higher than			
sweetpotatoes in general...	56	88	75
rated the second higher			
than the first.....	56	11	30
rated both the same.....	---	69	40
rated the second lower			
than the first.....	---	8	5
Lower than sweetpotatoes in			
general.....	44	12	25
rated the second dish			
higher than the first..	13	---	5
rated both the same.....	25	---	10
rated the second dish			
lower than the first...	6	12	10
Total.....	100	100	100
Number of respondents.....	78	115	193

Would Homemakers Purchase the Flakes:

When asked, "If these sweetpotato flakes were sold in the grocery stores, do you think that you would buy them or not?" --

- 16 percent of the respondents said they would not buy,
- 84 percent said they would buy:
 - 13 percent said once a week or more,
 - 23 percent said 2-3 times a month,
 - 28 percent said once a month,
 - 18 percent said less often,
 - 2 percent not ascertained.

Answers to questions such as these cannot be considered an index of future purchases; they do indicate that the respondents were pleased with the product and might buy, depending upon a variety of factors such as price, packaging, advertising and display space, availability of other kinds of sweetpotatoes, etc. The supposition that these figures are too optimistic is supported when one looks at the frequency with which these respondents

use instant white potatoes. White potatoes are generally served more often than sweetpotatoes and instant white potatoes are relatively popular. Even so.

44 percent of the respondents had never served or had not served instant white potatoes in the last year.

56 percent had served them:

9 percent served once a week or more,

5 percent served 2-3 times a month,

4 percent served once a month,

38 percent served less often.

The frequency of serving instant white potatoes tends to cast doubt that the respondents would buy mashed sweetpotatoes with anywhere near the frequency they state.

Only 34 out of 214 women who tried a second test dish said they would not purchase the flakes if they were sold locally. While this number is too small to have much statistical reliability, the reasons these women gave for not wanting to purchase the flakes are interesting. About one-third said they did not like the flavor of the flakes; about one-third said they did not like canned or dehydrated products or only liked fresh sweetpotatoes; while one-third said they did not like sweetpotatoes in any form or did not like mashed sweetpotatoes.

Ratings of the Second Test Dish by Household Members other than the Respondent:

The ratings of the second test dish by household members 12 years of age and over are shown below, disregarding the not ascertained category. Overall, these ratings were higher than those for the first test dish, as was true of the ratings of the homemaker. The relatively lower distribution of ratings seems due to the influence of the younger household members:

Ratings	: Members 12 : Members 18 :	Total	: Homemakers
	: to 18 years:years of age:	1/	: rating
	: of age : and over :		
	: Percent	Percent	Percent
Like very much.....:	42	47	46
Like moderately.....:	17	27	24
Like slightly.....:	15	12	13
Neither like nor dislike..:	1	4	3
Dislike slightly.....:	7	1	3
Dislike moderately.....:	11	2	4
Dislike very much.....:	7	7	7
Total.....:	100	100	100
Number of respondents.....:	84	235	321

1/ Percentages are not shown separately for 2 cases in which the age of the household member was not ascertained.

While their reactions to the flakes improved with the more spicy dishes, young people tend to show less enthusiasm than their elders for the flakes. Again, as was mentioned for the first test dish, this is perhaps as much a lack of enthusiasm for sweetpotatoes generally as it is for the flakes.

Changes in the Second Recipe:

Seventy-one percent of the respondents said they followed the second recipe exactly, while 77 percent indicated that there were no changes that they would make if they used the recipe again. Changes made in the second recipe were generally of the same kind as those made in the first recipe -- the addition of extra spices, butter, margarine, or sugar to suit the taste (table 3). Suggested changes for future use were very much the same as the changes actually made. Relatively more women suggested the addition of spices, sugars, etc., to the mashed sweetpotato flakes than for the second recipe. This suggests a certain blandness in the mashed dish. The difference is not large, however. Only 15 percent more women suggested changes on the first recipe than on the second.

How Should the Test Product be Packaged:

When respondents were asked what kind of container they would like the new product to be packaged in:

- 62 percent said the can,
- 11 percent said an aluminum foil pouch,
- 8 percent said a glass container
- 2 percent said a plastic bag,
- 2 percent said a paper box,
- 4 percent gave other kinds of containers,
- 11 percent said they did not care.

These responses possibly mean little more than that the respondent was satisfied with the container in which the sample was packaged. Experience with another type of package, especially the visual experience of a different package on the store shelf, might create a different pattern of response to this question.

Table 1.--Ratings of sweetpotatoes in general, mashed sweetpotato flakes, and the second test dishes, by homemakers who had served them

Ratings	Homemakers who had served--									
	Sweetpotatoes		Mashed		Totals for		Sweetpotato flakes			
	in general				pie, casse- role dishes		Marshmallow casserole		Orange casserole	Pie
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Like very much -----	63	40	60	50	55	79				
Like moderately -----	27	30	23	27	27	15				
Like slightly -----	6	12	8	11	9	1				
Neither like nor dislike --	1	4	1	1	---	1				
Dislike slightly -----	1	4	2	3	2	1				
Dislike moderately -----	1	2	2	4	---	---				
Dislike very much -----	1	8	4	4	7	3				
Total -----	100	100	100	100	100	100				
Number of respondents -----	1/238	253	214	99	45	70				

1/ Does not include 34 respondents who did not use sweetpotatoes and did not rate sweetpotatoes in general.

Table 2.--Favorable comments on sweetpotatoes in general, mashed sweetpotato flakes, and the second test dishes

Favorable comments	Homemakers who had used--					
	Sweet- potatoes in general	Mashed sweet- potato flakes	Totals for pie, casse- role dishes	Marsh- mallow casse- role	Orange casse- role	Pie
	Pct. 1/	Pct. 1/	Pct. 1/	Pct. 1/	Pct. 1/	Pct. 1/
Taste: -----	75	57	76	74	78	77
Liked the flavor (general), or good flavor -----	32	23	22	16	22	31
Liked the sweet taste -----	43	8	13	21	2	7
They have a fresh, natural, flavor -----	---	28	24	25	16	29
They tasted better than mashed sweetpotato flakes -----	---	---	8	11	4	7
Topping improved the flavor ---	---	---	14	14	34	---
Other taste comments -----	---	---	3	1	---	9
Texture: -----	5	36	40	35	29	53
Smooth, fluffy, creamy texture :	2	26	29	25	13	44
Not stringy, tough, or mealy --	---	5	8	8	7	9
Other texture comments -----	4	8	9	8	10	8
Convenience: -----	17	79	69	67	64	76
Easy to fix, quick, save time and labor -----	15	78	69	67	64	74
Other convenience comments ----	4	3	2/	4	---	3
Versatility: -----	57	5	10	13	11	5
They can be used in a variety of ways -----	27	3	1	2	---	---
They complement certain meats --	20	2/	2/	1	---	---
Add variety to meals -----	6	2/	2	1	4	1
Add color to meals -----	16	1	7	9	9	1
Provide a change from white potatoes -----	9	---	2/	1	---	---
Other versatility comments ----	5	1	1	---	---	3
Health: -----	16	1	1	1	4	---
Nutritious (general) -----	8	---	2/	---	2	---
Filling -----	5	1	---	---	---	---
Other health comments -----	5	---	1	1	2	---
Good color -----	2/	13	9	8	7	13
Just like them -----	7	1	2	2	---	3
Other -----	6	1	1	2/	4	1
Not ascertained, do not know ----	1	---	---	---	---	---
Nothing liked about them -----	2	6	7	7	9	4
Number of respondents -----	238	253	214	99	45	70

1/ Percentages may add to more than their subtotals and these add to more than 100 because some respondents gave more than one reply.

2/ Less than 1 percent.

Table 3.--Unfavorable comments on sweetpotatoes in general, mashed sweetpotato flakes, and the second test dish

Unfavorable comments	Homemakers who had used--							
	Sweet- potatoes in general	Mashed sweetpotato flakes	Totals for pie, casse- role dishes	Marshmallow: casserole	Orange casserole	Pie		
	Percent 1/ 8	Percent 1/ 41	Percent 1/ 22	Percent 1/ 30	Percent 1/ 24	Percent 1/ 10		
Taste: -----								
Flat taste, no flavor, bland -----	1	13	3	5	4	---		
Artificial taste, not a fresh taste --	---	11	7	10	2	4		
Tastes like pumpkin or squash -----	2/ 6	5	2	2	---	4		
Too sweet -----	1	5	5	6	7	1		
Not sweet enough -----	2/ 1	4	3	5	2	1		
Other taste comments -----		10	9	12	11	1		
Texture: -----	4	17	7	10	2	7		
Watery, too moist -----	---	8	4	4	2	4		
Dry, not moist enough -----	3	8	2	3	---	3		
Other texture comments -----	1	1	2	4	---	---		
Convenience: -----	14	2/ 2	2	1	9	---		
Difficult to fix, too much time, work --	11	2/ 2	2	1	---	---		
Other convenience comments -----	4	---	---	---	---	---		
Versatility: -----	10	4	2	2	7	---		
Limited in ways they can be served ---	1	4	1	1	5	---		
Other versatility comments -----	9	---	2	1	2	---		
Health: -----	13	1	1	---	2	3		
Too fattening, too many calories -----	8	1	1	---	---	2		
Other health comments -----	5	2/ 2	---	---	---	1		
Don't like the color -----	---	5	2	1	---	4		
Don't like the odor -----	---	3	1	1	---	1		
The quality is not always good -----	12	---	---	---	---	---		
Other -----	10	2	3	3	---	5		
Not ascertained, do not know -----	6	1	2/ 2	---	2	---		
Nothing disliked about them -----	41	48	64	61	56	74		
Number of respondents -----	238	253	214	99	45	70		

1/ Percentages may add to more than their subtotals and these add to more than 100 because some respondents gave more than one reply.

2/ Less than 1 percent.

Table 4.--Favorable and unfavorable comments on sweetpotatoes in general and mashed sweetpotato flakes

Comments	Homemakers who had rated--			
	Sweet- potatoes in general	Mashed sweetpotato flakes		Total
		As high or higher than sweetpotatoes in general	Lower than sweetpotatoes in general	
	<u>Percent</u> <u>1/</u>	<u>Percent</u> <u>1/</u>	<u>Percent</u> <u>1/</u>	<u>Percent</u> <u>1/</u>
Favorable comments on:				
Convenience -----	17	73	78	75
Taste -----	75	80	21	55
Texture -----	5	62	25	34
Color -----	<u>2/</u>	15	15	15
Versatility -----	57	5	4	5
Health -----	16	2	1	1
Other -----	12	6	17	11
No favorable comments ---	2	2	9	5
Unfavorable comments on:				
Taste -----	8	16	77	43
Texture -----	4	9	28	18
Convenience -----	14	---	1	<u>2/</u>
Color -----	2	4	10	7
Versatility -----	10	2	8	4
Health -----	13	1	1	1
Quality -----	16	---	---	---
Other -----	8	1	8	4
No unfavorable comments -	41	73	11	46
Number of respondents -----	238	128	99	227

1/ Percentages add to more than 100 because some respondents gave more than one reply.

2/ Less than 1 percent.

Table 5.--Homemakers' preference for fresh sweetpotatoes or sweetpotato flakes for making mashed sweetpotatoes and the reasons for preference, asked of those who had used both types

Reasons	Homemakers who had used both types and rated flakes --		
	As high or higher than sweetpotatoes in general	Below sweet- potatoes in general	Total
	Percent 1/ 77	Percent 1/ 25	Percent 1/ 55
Prefer sweetpotato flakes -----			
Easier to fix, take less time, work -----	63	21	46
Good flavor, taste -----	23	---	14
Better texture, not stringy, lumpy -----	10	2	7
Other -----	16	3	11
Prefer fresh sweetpotatoes -----	17	62	36
Better flavor generally -----	6	33	18
Flakes do not have fresh, natural flavor --	5	11	8
Better texture -----	3	10	6
Other -----	9	17	12
No preference -----	4	9	6
Not ascertained -----	2	4	3
Total -----	100	100	100
Number of respondents 2/ -----	115	84	199

1/ Percentages add to more than their subtotals because some respondents gave more than one reply.

2/ Does not include 26 respondents who did not use sweetpotatoes, plus 28 respondents who did not use fresh sweetpotatoes.

Table 6.--Homemakers' preference for canned sweetpotatoes or sweetpotato flakes for making mashed sweetpotatoes, and the reasons for preference, asked of those who had used both types

Reasons	Homemakers who had used both types and rated flakes --		
	As high or higher than sweetpotatoes in general	Below sweet- potatoes in general	Total
	Percent 1/ 82	Percent 1/ 38	Percent 1/ 63
Prefer sweetpotato flakes -----			
Easier to fix, take less time, work -----	50	18	36
Better flavor -----	28	12	21
Better texture, not stringy or lumpy -----	26	12	20
Better texture, canned are soft, spongy ---	8	1	5
Other -----	13	5	10
Not ascertained -----	5	3	4
Prefer canned sweetpotatoes -----	4	45	22
Better flavor (general) -----	2	30	15
More natural flavor -----	2	7	4
Other -----	1	9	5
No preference -----	11	16	13
Not ascertained -----	3	1	2
Total -----	100	100	100
Number of respondents 2/ -----	92	73	165

1/ Percentages add to more than their subtotals because some respondents gave more than one reply.

2/ Does not include 26 respondents who did not use sweetpotatoes, plus 62 respondents who did not use canned sweetpotatoes.

NOTE ON THE SAMPLING ERROR

Since the results of the survey are based on interviews with a sample of households, these results may differ, as a result of chance, from those which would be obtained from interviews with all of the households in the Alexandria Metropolitan Area. The reported percentages are estimates of the percentages which would be obtained from a complete enumeration. Statistical techniques are available, however, for estimating the error due to sampling or extent to which an estimated percentage can be expected to differ.

Standard errors for selected percentages are shown below. It should be noted that the size of the error varies with the size of the percentage and the number of respondents in the sample. The size of the error may also vary from question to question for the same size percentage, depending upon the uniformity of response or lack of it within the sample clusters; that is, depending upon the magnitude of the intra-class correlation. Since the standard error may vary from question to question, the percentage replies to three questions are shown to illustrate the magnitude of the errors in the present survey. The questions used were those asking the respondent how she would rate sweetpotatoes in general, and then the two test dishes.

As an example of interpreting the standard errors for mashed sweetpotato flakes rating, "Like very much": In repeated sampling, the population or true percentage will be expected to lie in the confidence interval (40 ± 3.1) in 66 cases out of 100; or would lie in the two standard error interval (40 ± 6.2) in 95 out of 100 cases.

Standard Errors for Percentage Replies to Three Questions

Respondent's rating	: Respondents' ratings of the dish and the sampling error of : these estimates in percentage points					
	: Mashed sweet- : potato flakes		: Sweetpotatoes : in general		: Second test : dish	
	: Percent : rating : it	: Standard : error : of the : percent	: Percent : rating : it	: Standard : error : of the : percent	: Percent : rating : it	: Standard : error : of the : percent
Like very much ---:	40	3.1	63	3.5	60	3.6
Like moderately --:			27	3.2	23	3.0
Like slightly ----:					8	2.0
Dislike very much -----:	8	1.7				
Number of respond-:						
ents in sample --:	253		238		214	

With the exception of check-box material, office-record information, and free-answer space, the questionnaires used for this study are reproduced below in entirety. Data from a few of these questions have been omitted from tables and text because the number of responses involved were too small to be significant.

Questionnaire No. 1

Hello, I am from the U. S. Department of Agriculture. We are conducting a market survey on the use of sweetpotatoes. I would like to ask you the following questions:

1. About how often do you serve sweetpotatoes to your family, in any form, during the fall and winter months? 2. (If served less than once a week.) How is it that you do not serve them more often?
3. About how often do you serve them to your family during the spring and summer months? 4. (If served less than once a week.) How is it that you do not serve them more often? (IF RESPONDENT DOES NOT SERVE SWEETPOTATOES AT ALL, SKIP TO QUESTION 16.)
5. (Show Card A.) From this rating scale you can see that your opinion of sweetpotatoes can be expressed anywhere from "Dislike very much" up through "Like very much." Which one of these categories best expresses your opinion of sweetpotatoes in general? (See Table 1 for a list of categories.) 6. Why did you rate them this way? 7. What (else) do you like about them? 8. What (else) don't you like about them? 9. How about the rest of the family, is there anyone (else) who does not like them? (If Yes) Who was that? (Specify relationship and age.)
10. What kind of sweetpotatoes do you serve most often, fresh or canned? Have you also served (kind not specified) during the past 12 months? (If No) Why is that?

FOR USERS OF CANNED SWEETPOTATOES:

11. a. What is it about the canned sweetpotatoes that makes you choose them in place of the fresh sweetpotatoes? b. Now, on the other hand, what is there about canned sweetpotatoes that you do not like as well as fresh sweetpotatoes? c. (If respondent has also used fresh.) How is it that you do not buy the canned form all of the time?

FOR USERS OF FRESH SWEETPOTATOES:

12. When you are shopping for fresh sweetpotatoes, what kind of things do you look for? (For each characteristic named.) Why is that important to you?

ALL USERS

13. During the past 12 months have you purchased any frozen sweetpotatoes? (If purchased) What did you think of them? (If not purchased) Have you ever seen or heard of them? (If Yes) How is it that you have not purchased any?
14. Incidentally, have you ever served instant white potatoes? (If Yes) Would you say that you serve them; -- Once or more a week, Two or three times a month, Once a month, Every two or three months, or Once or twice a year?
15. In what ways do you fix sweetpotatoes? (If not already mentioned) Did you ever serve them: As plain mashed sweetpotatoes? With orange juice or orange topping? With marshmallows? In sweetpotato pie?
16. Now I would like to ask just a few questions about your family. These questions enable us to compare the opinions of people with different backgrounds. No one will be identified by their answers.
First, I would like to list all the family members who are presently living at home. (List all persons in terms of relationship to respondent: e.g., husband, mother-in-law, son, etc.) 17. What are the ages of your children? ---- other family members? ---- yourself?
18. We often find that a person's taste for foods is influenced by his background and that of his parents. For that reason we are interested in knowing where your parents were born. What State (country) was your mother born in? What State (country) was your father born in? What State (country) was your husband's father born in? What State (country) was your husband's mother born in? 19. As far as you can recall, were sweetpotatoes ever used in your parents' home? How about your husband's parents' home?
20. What is the highest grade of school completed by the head of the household?
21. (Hand respondent income card.) What was the total family income in 1961, before deductions and taxes?

Now, one of the reasons for these questions is that the Department of Agriculture is working on a new form of sweetpotatoes for home use. We would like to give you some of these and ask you to serve them to your family. Then we will come back to find out how you liked them and what you thought of them?

I will leave this can of sweetpotato flakes and ask you to serve them to your family as mashed sweet-potatoes. If at all possible, we would like to ask you to use them within the next two or three days. I will leave these instructions on how to prepare them and this scale on which to rate your opinion of them after they have been served and eaten. We would like also each member of your family who is 12 years of age and over to rate these sweetpotatoes after eating them.

When I come back, we will ask you to use these sweetpotato flakes a second time, in a different recipe, and to rate them for us again. I will be back again on _____. What time would be most convenient?

Questionnaire No. 2

Introduction: Mrs. _____, I am calling back from the Department of Agriculture about the sweetpotato flakes. Have you had a chance to use them yet or not? (If "No", ask her to use them and make another appointment to call back.) If "Yes" ask her for the rating scale (scale B) and enter respondents's rating of the dish.

2. I see that you rated these mashed sweetpotatoes (repeat rating). Why did you rate them this way? 3. What (else) did you like about them? 4. What (else) didn't you like about them? 5. Was there anyone who did not fill out a rating scale who did not like them? (If Yes) -- Who was that? (Specify relationship and age).
6. Did you follow the recipe exactly as called for, or did you change it in any way? (If changed) -- in what way? 7. Are there any other changes that you would make in the recipe in order to improve it? (If Yes) -- What are they? 8. About how many servings did you get from one can of these sweetpotato flakes? 9. Is that about the right size for your family or would you prefer a larger or smaller can?

INTERVIEWER FILL IN BEFORE INTERVIEW FROM QUESTIONNAIRE 1, QUESTION 10.

Respondent's use of fresh sweetpotatoes in past 12 months: ____ has used fresh ____ has not used fresh (skip to question 11.)

10. Now if you were to compare these sweetpotato flakes with fresh sweetpotatoes for making mashed sweet-potatoes, which would you prefer? Why do you say that? How about from the standpoint of taste, which would you prefer?

INTERVIEWER FILL IN BEFORE INTERVIEW FROM QUESTIONNAIRE 1, QUESTION 10.

Respondent's use of canned sweetpotatoes in past 12 months: ____ has used canned ____ has not used canned (skip question 11 to second placement.)

11. Now, if you were to compare these sweetpotato flakes with canned sweetpotatoes for making mashed sweetpotatoes, which would you prefer? Why do you say that? How about from the standpoint of taste, which would you prefer?

I am going to leave enough sweetpotato flakes for you to serve them to your family again this week. This time though, we would like you to use whichever of these three recipes you prefer: Orange Marsh-mallow, Pie. Again we would like you and each family member 12 and over to rate this sweetpotato dish after eating it. I will be back again next week to pick up your rating scale and to see what you think of the dish. Incidentally, shall I come at this time next week or is there a better time for me to call?

Questionnaire No. 3

Introduction: Mrs. _____, I am calling back from the Department of Agriculture about the sweetpotato flakes. Have you had a chance to use them yet or not? (If "No" ask her to use them and make another appointment to call back.)

1. Dish made by respondent (check one) Orange Marshmallow Pie (Enter respondent's rating of the dish)
2. I see that you rated these (specify dish) sweetpotatoes (repeat rating). Why did you rate them this way? 3. What (else) did you like about them? 4. What (else) didn't you like about them? 5. Was there anyone who did not fill out a rating scale who did not like them? (If Yes) Who was that? (Specify relationship and age)
6. Did you follow the recipe exactly as called for, or did you change it in any way? (If changed) In what way?
7. Are there any changes that you would make in the recipe to improve it? (If Yes) What are they?
8. If these sweetpotato flakes were sold in the grocery stores around here, do you think that you would buy them or not? If would not buy -- Why is that? If would buy -- About how often? Would that be in place of, or in addition to, your purchases of fresh sweetpotatoes?

How about canned sweetpotatoes, would that be in place of, or in addition to, your purchases of canned sweetpotatoes?

Incidentally, what kind of container would you like the product to be packed in -- glass, can, aluminum foil pouch, other (specify), don't care?

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